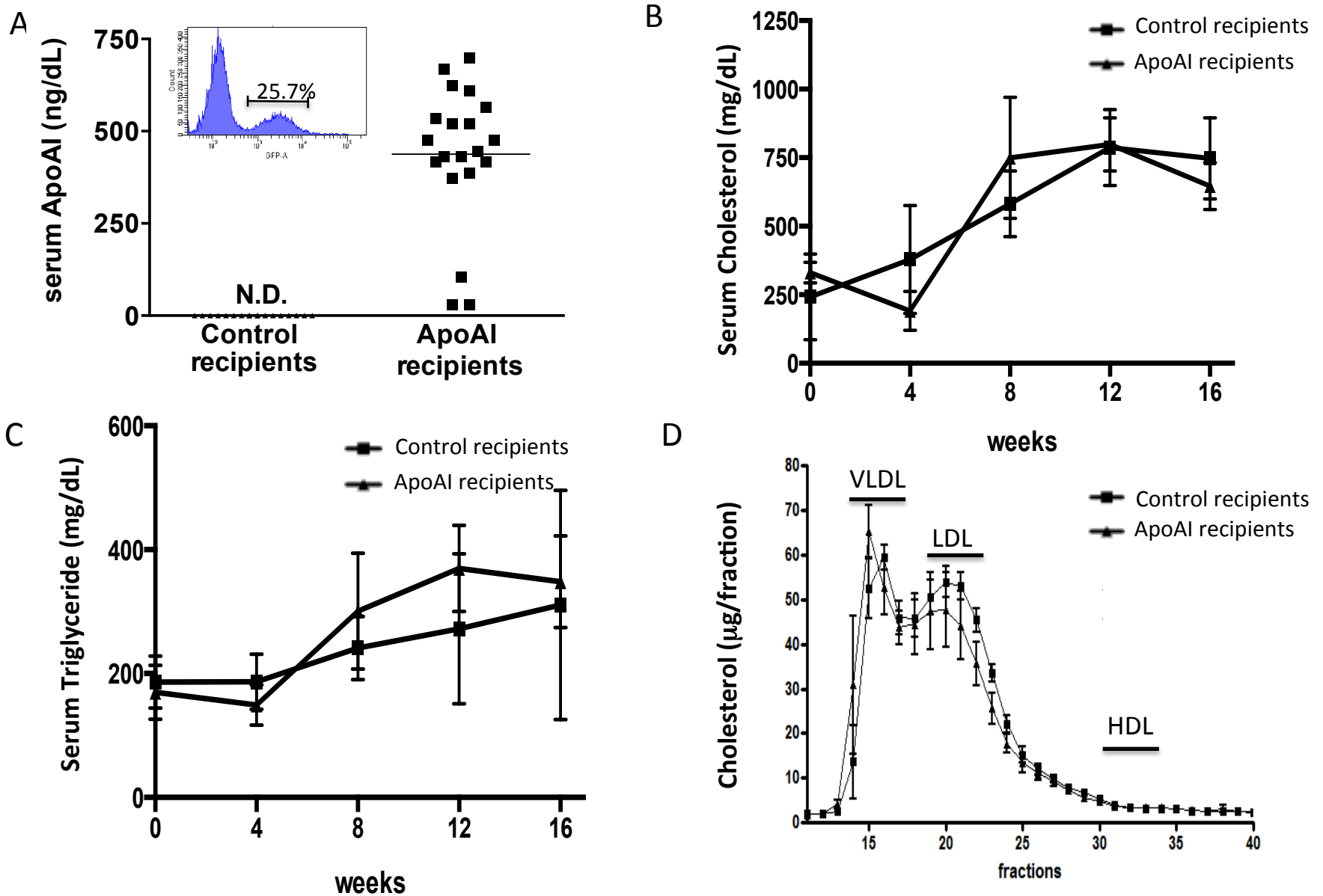
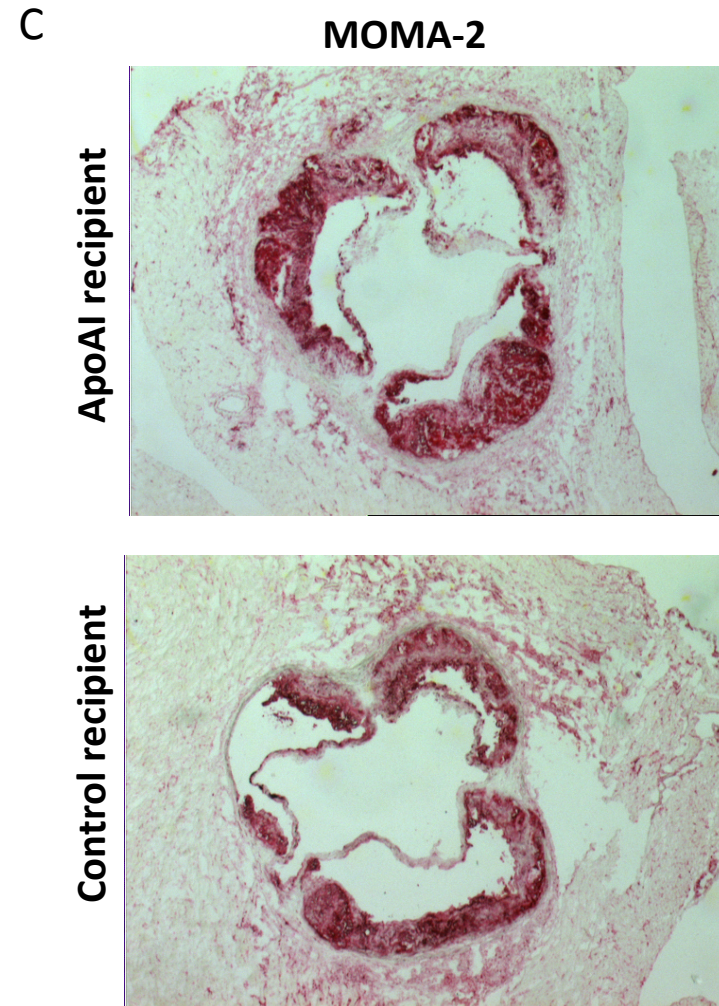
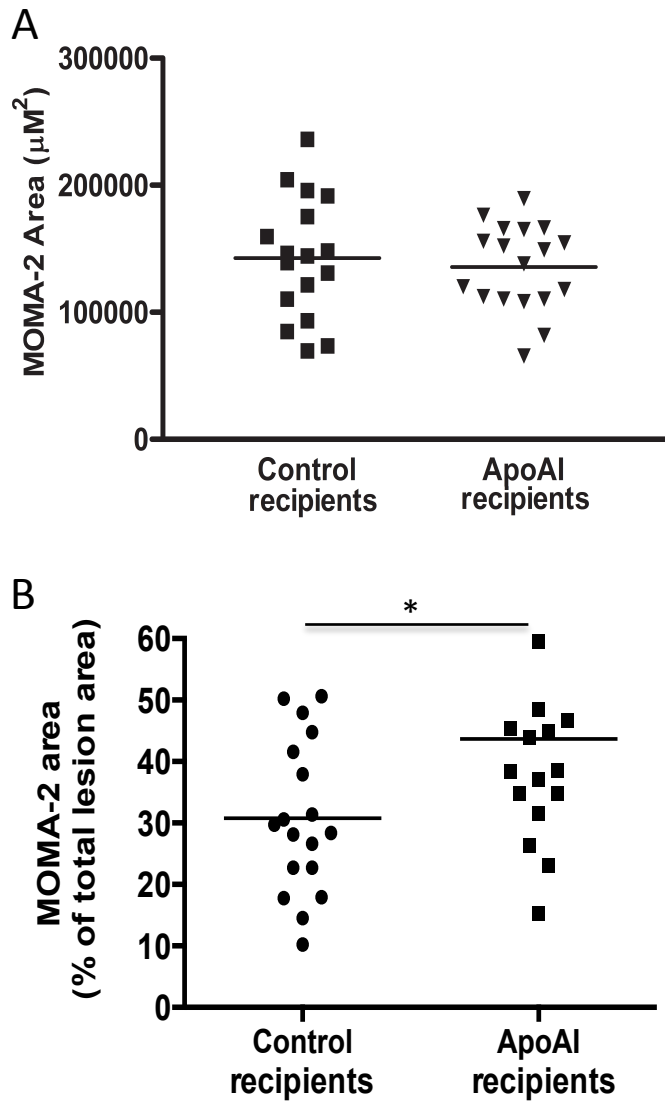


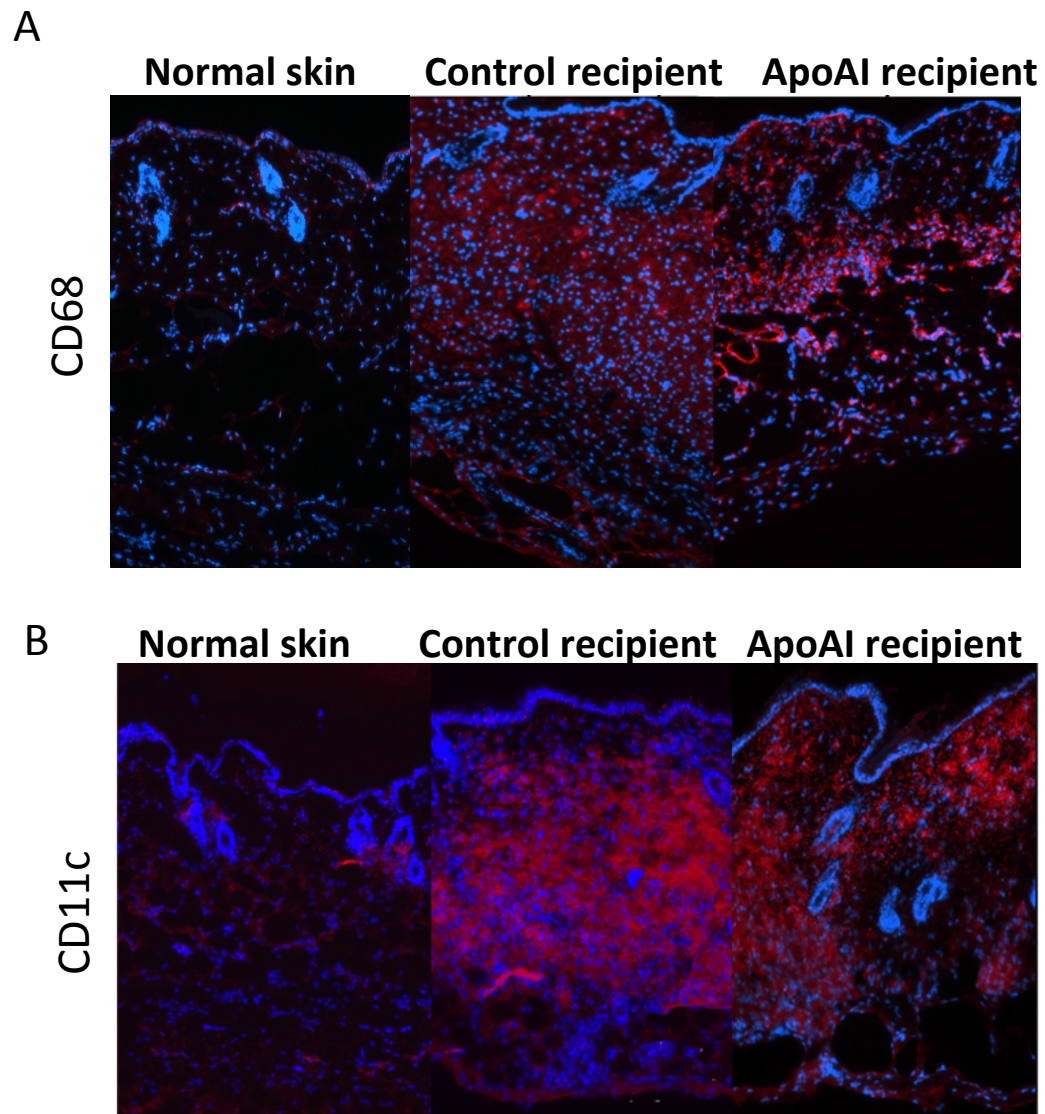
**Supplementary Figure 1.** Schematic illustration of lentiviral expression constructs. (A) Green Fluorescent Protein (GFP) and (B) apoA1. apoA1 and GFP gene expression is regulated by the human macrophage specific promoter, CD68.13. The HIV-13' long terminal repeat (LTR) is shown with a self inactivating (SIN) deletion. *p*, Packaging signal. SD, splicing donor site, SA splicing acceptor site. CPPT, central polypurine tract. HGH, human growth hormone poly-A signal sequence. WPRE, woodchuck hepatitis virus posttranscriptional regulatory element.



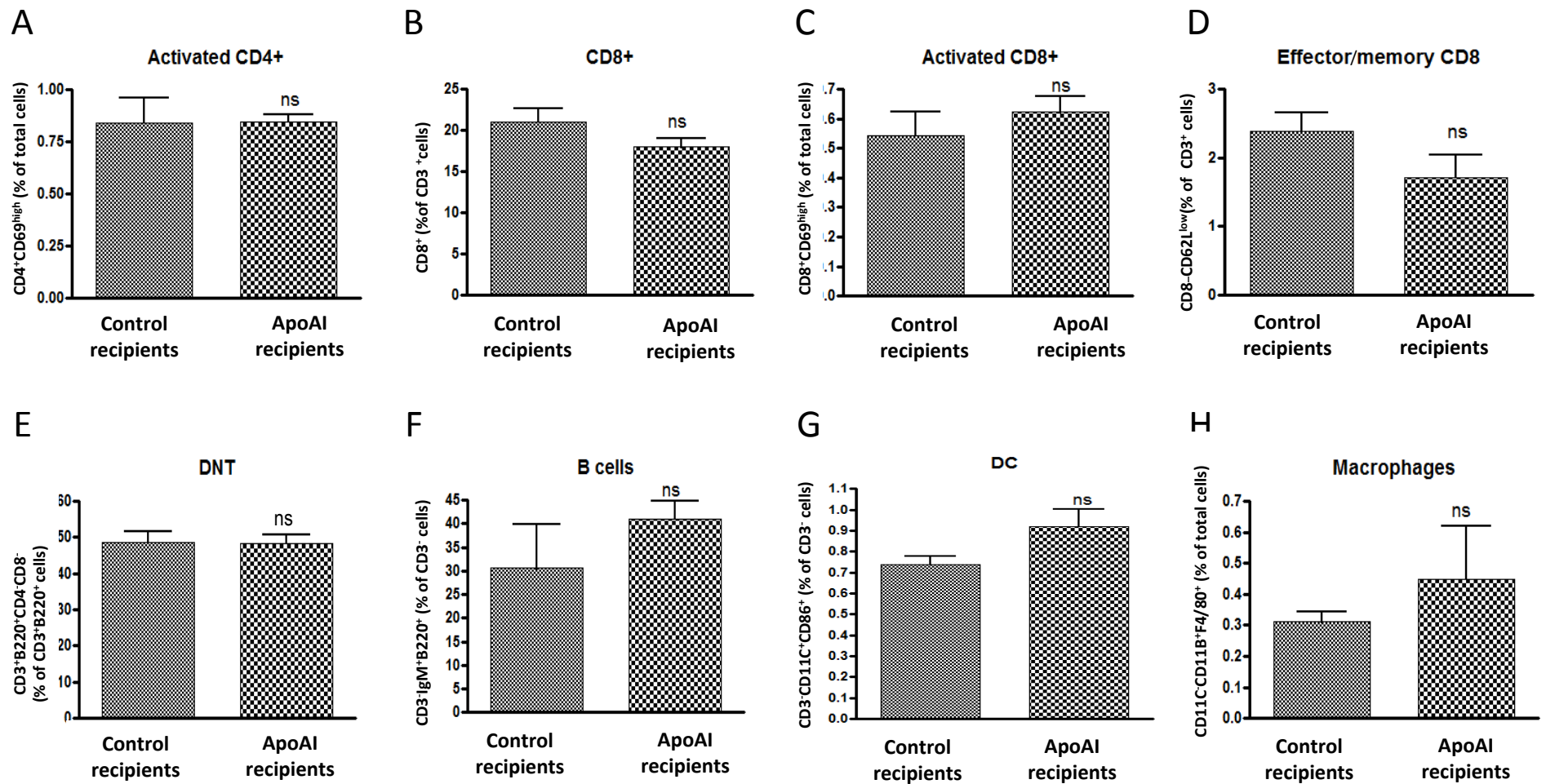
**Supplementary Figure 2. Serum parameter of recipient mice on palm oil diet (A) apoAI levels of LDLR<sup>-/-</sup>/apoAI<sup>-/-</sup> recipient mice at 16 weeks after HPC transplant. Insert: FACS analysis of HPC transduction efficiency. (B) Serum cholesterol at 0, 4, 8, 12 and 16 weeks after HPC transplant. (C) Serum triglyceride at 0, 4, 8, 12 and 16 weeks after HPC transplant. (D) Lipoprotein profile of**



**Supplementary Figure 3. Aortic Lesion macrophage (MOMA-2) content.** (A) MOMA-2 stained area in proximal aortas of  $\text{LDLR}^{-/-}/\text{apoAI}^{-/-}$  recipient mice 16 weeks after HPC transplant on palm oil diet. (control recipients – 9 females and 8 males; apoAI recipients - 8 females and 10 males). (B) Percent of MOMA-2 stained area out of total lesion area in proximal aortas of  $\text{LDLR}^{-/-}/\text{apoAI}^{-/-}$  recipient mice 16 weeks after HPC transplant on palm oil diet. (control recipients – 10 females



**Supplementary Figure 4.** Representative macrophages/CD68 (A); and dendritic cells/CD11c (B) immunostaining (red) on top of DAPI staining (blue) of LDLR<sup>-/-</sup>/apoA1<sup>-/-</sup> DKO recipient mice 16



**Supplementary Figure 5. Lymph node cell population:** (A) Activated CD4<sup>+</sup>. (B) CD8<sup>+</sup>. (C) Activated CD8<sup>+</sup>. (D) Effector/Memory CD8. (E) Double Negative T-cells (DNT). (F) B cells. (G) dendritic cells